



The Field EMS Quality, Innovation and Cost-Effectiveness Improvement Act, H.R. 3144 Introduced by Representatives Tim Walz (D-MN) and Sue Myrick (R-NC)

Emergency Medical Services (EMS) Makes A Difference for Millions of Americans

Emergency medical services (EMS) encompasses emergency medical and trauma care provided to patients at any point in the continuum of health care services. EMS provides services for a wide range of emergency medical conditions (including trauma, stroke and cardiac) from answering 9-1-1 calls, first response, field medical response, medical transport, hospital treatment and rehabilitation. EMS saves lives and is a unique and critical part of the healthcare delivery system. EMS is a public benefit provided by both governmental and non-governmental providers that citizens assume will always be there to serve them. "Field EMS" refers to emergency medical and trauma care provided *outside* of the hospital, most often prior to and during transport to a hospital, and is a medical service delivered in the public health and public safety environments. Field EMS providers conduct nearly 25 million transports for more than 8% of the US population per year, predominantly by ground but also by air. "Hospital EMS" refers to emergency medical care provided *inside* the hospital, such as in the hospital emergency department. "Trauma care" encompasses initial field care, and subsequent care provided by a trauma center within a hospital. Multiple authorities including the Institute of Medicine (IOM), National Highway Traffic Safety Administration (NHTSA), Federal Interagency Committee on Emergency Medical Services (FICEMS), and National Emergency Medical Services Advisory Council (NEMSAC) have described the difference that EMS makes for patients. Although there is a growing body of evidence compiled by NEMSAC documenting the value of Field EMS care in improved patient outcomes and/or cost-effectiveness for heart, stroke, and respiratory emergencies, as well as pediatric and trauma care, Field EMS remains significantly underfunded and is severely challenged to best serve patients.

EMS At the Crossroads

The landmark 2006 Institute of Medicine (IOM) Report *Emergency Medical Services: At the Crossroads*ⁱ identified systemic problems that undermine the public trust and reliance upon EMS to protect them in their greatest hour of need. Strong federal funding in the 1970's fueled the initial development of EMS systems at the state and local levels. Yet, in the 1980's the withdrawal of comprehensive federal funding led to haphazard growth and implementation of EMS systems across the country. Today, while fire and police first responders have several targeted federal support programs, there is no dedicated federal funding stream for field EMS responders to ensure their capability to respond to medical emergencies as part of a coordinated emergency care system. There are several federally authorized programs for rural EMS and trauma care, but these are not currently receiving federal appropriations. Other systemic problems identified by IOM include: insufficient coordination among EMS providers, disparities in response times, uncertain quality of care, lack of readiness for disasters and inadequate federal funding for disaster preparedness, divided professional identity of EMS personnel, and significantly, a limited evidence base of emergency medical interventions.

In many areas, EMS services are highly fragmented, poorly equipped and insufficiently prepared for day-to-day operations, let alone natural or man-made major disasters. A 2007 GAO reportⁱⁱ noted that Medicare payments for Field EMS are 6% below the average cost per transport in urban areas and 17% in super rural areas. Hospital EMS is challenged by overburdened hospital emergency departments (EDs) – from 1993-2003, 425 ED's closed while ED visits rose by more than 25% in the same period. As noted by the IOM, crowded EDs resulted in a half million diverted Field EMS transports in 2003 creating accessibility issues for emergency ambulance services. Between 1990-2005, thirty percent of trauma centers closedⁱⁱⁱ despite the fact that for severely injured patients, care at a Level I trauma center can lower risk of death by 25%^{iv}. EMS is multi-jurisdictional with federal agency responsibility tasked across DHS, HHS, DOT, IHS, FCC, and DOD. Federal grant funding for *other components* of EMS (such as hospital preparedness) falls within a variety of programs with multiple responsibilities and competing priorities. Accordingly, federal funding for EMS is fragmented, limited, and all too often is overlooked in favor of other needs.

In *EMS Makes A Difference*^v, NEMSAC identified barriers to adopt interventions that improve outcomes and cost savings to the patient and health system. One example is the use of the 12-lead electrocardiogram that can identify a heart attack patient with ST Elevation Myocardial Infarction (STEMI) who should bypass the emergency room and go straight to the catheterization lab. Timely treatment of a STEMI patient within a window of 90 minutes to percutaneous coronary intervention (PCI) is optimal for patient outcomes with faster recovery, less invasive intervention at a lower cost than traditional coronary bypass graft (CABG) surgery. Yet only half of EMS systems have 12-lead ECGs on their ambulances, and most had no standard method to deliver the ECG to the hospital. The cost of one 12-lead ECG heart monitor can cost \$25,000 per ambulance that serves thousands of patients. The cost savings per patient of PCI versus CABG is \$18,932 with slightly better life-expectancy^{vi}. There is no reimbursement that recognizes the additional cost of developing a 12-lead ECG and STEMI program.

Vision for Future of EMS -- Forging a Path Beyond the Crossroads

The IOM *EMS At the Crossroads* report envisions a system in which all communities will be well served by well-planned and highly coordinated emergency medical and trauma care services that are accountable for their performance. From the patient's point of view, delivery of services for every type of emergency will be seamless. The delivery of all services will be evidence based and innovations will be rapidly adopted and adapted to each community's needs. To achieve that vision, the IOM recommended:

- *Federal Home for EMS and Trauma* -- the designation a lead Federal agency for EMS and trauma at HHS;
- *System Finance* -- that CMS evaluate reimbursement for EMS and make recommendations with regard to readiness costs and permitting payment without transport;
- *Regionalization* -- the development of evidence based categorization systems for EMS, emergency departments and trauma centers based on capabilities as well as evidence-based model prehospital care protocols for treatment, triage, and transport of patients;
- *National Standards for Training and Credentialing* -- adoption among the states of a common scope of practice for field EMS practitioners with state licensing reciprocity and acceptance of national certification as prerequisite for state licensure and local credentialing of field EMS practitioners and national accreditation of paramedic education programs;
- *Enhanced medical direction* -- medical oversight and direction should be provided by physicians that meet standardized minimum requirements for training and certification;
- *Coordination* -- Dispatch, EMS, emergency department and trauma care providers, public safety and public health should be fully interconnected and united in an effort to ensure that each patient receives the most appropriate care, at the optimal location, with the minimum delay;
- *Communication and Data Systems* -- develop integrated and interoperable communications and data systems. Integrate field EMS into design deployment and financing of National Health Information Infrastructure.

The Field EMS Quality, Innovation and Cost-Effectiveness Improvement Act, H.R. 3144

The Field EMS Quality, Innovation, Cost-Effectiveness Improvement Act would provide a path out of the crossroads and toward the vision outlined by the IOM. It addresses many of the challenges plaguing EMS to better fulfill public expectations that all who need emergency medical and trauma care in the field can depend upon the highest quality of care and transport to the most appropriate clinical setting. Key components of this legislation include:

- *Recognition of HHS as Primary Federal Agency for EMS and Trauma*: The bill establishes HHS as the primary federal agency for EMS and trauma care, including through the establishment of an Office of EMS and Trauma to provide a home, voice and identifiable federal agency for EMS. The Office would develop a cohesive national field EMS strategy to strengthen the development of EMS at the Federal, State and local levels. Recognition of HHS' role as the primary federal agency for EMS would not alter the statutory authority of other federal agencies.
- *Federal Funding to Forge Path Out of the Crossroads*: Establishment of three essential grant programs to foster improvements in quality, innovation and preparedness and strengthen accountability including:

- Field EMS Agency Grants -- to promote excellence in all aspects of field EMS, enhance the quality through evidence-based and medically directed care, promote universal availability of field EMS in all geographic locations of the Nation, spur innovation in the delivery of field EMS, and improve EMS agency preparedness for everyday and catastrophic emergency medical response.
- State Grants -- to improve field EMS system performance, integration and accountability, ensure preparedness for field EMS, enhance physician medical oversight of field EMS systems and care, improve coordination between regional field EMS systems and integration into the health care system, enhance data collection and standardization certification of EMTs and paramedics.
- Education Grants -- provided to EMS educational institutions to ensure the availability, quality, and capability of field EMS educators, practitioners and medical directors.
- *Improved Quality and Accountability:* Enhancing Field EMS quality by promoting the development of national guidelines for medical oversight by physicians of field EMS, promoting high-quality medical direction and maximizing participation and training of physician medical direction, evaluation by GAO of medical liability and reimbursement issues that may impede medical direction, enhance data collection and analysis to better inform the provision of high quality field EMS, development of a path toward integration of field EMS medical reports into patients electronic medical records.
- *Evaluation of Innovative Delivery Models:* Evaluating innovative models for access and delivery of field EMS for patients, including alternative dispositions of patients for whom transport to the hospital is not medically necessary.
- *Enhanced Research:* Enhancing research in field EMS by authorizing a Field EMS Practice Center and delineating specified funding streams for other federal EMS research to further improve quality, outcomes and promote the adoption of cost-effective treatments in the field.
- *Funding:* The bill does not add to the federal deficit. It establishes an Emergency Medical Services Trust Fund to be funded by voluntary contributions made by taxpayers when filing their federal income tax forms for the purpose of funding the grant programs provided in this legislation. The legislation directs the Secretary of HHS to utilize discretionary funds for start up funding for the programs under the Office of EMS and Trauma.

ⁱ *Future of Emergency Care: Emergency Medical Services at the Crossroads*, Institute of Medicine of the National Academies, the National Academies Press Washington, D.C. www.nap.edu, 2006.

ⁱⁱ *Ambulance Providers: Costs and Expected Medicare Margins Vary Greatly*, 2007, Government Accountability Office: GAO-07-383, www.gao.gov

ⁱⁱⁱ Renee Yuen-Jan HSIA and Yu-Chu Shen, Rising Closures of Hospital Trauma Centers Disproportionately Burden Vulnerable Populations, *Health Affairs*, 30, no.10 (2011): 1912-1920

^{iv} See Access to Trauma Centers in the United States, www.cdc.gov/TraumaCare

^v *EMS Makes A Difference: Improved Clinical Outcomes and Downstream Healthcare Savings*: A Position Statement of the National EMS Advisory Council, December, 2009 <http://www.ems.gov/pdf/nemsac-dec2009.pdf>.

^{vi} *Cost-Effectiveness of Coronary Artery Bypass Grafts Versus Percutaneous Coronary Intervention for Revascularization of High-Risk Patients*, Kevin T. Stroupe PhD et al, *Circulation* 2006: 114:1251-1257, the American Heart Association, Inc., <http://circ.ahajournals.org/cgi/content/full/114/12/1251>